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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/668,260
Filing Date: September 24, 2003
Appellant(s): OOKI ET AL.

Laurence E. Stein, Reg.No. 35371
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 05/01/2008 appealing from the Office action mailed 11/15/2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

Moskowitz (US Publication 2003/0200439) October 23, 2003

Van Horne (US Patent 5987430) November 16, 1999

Short (US Publication 20060239254) October 26, 2006

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,9-10,12-15, 17 rejected under 35 U.S.C. 103(a) as being unpatentable over Moskowitz (US Publication 2003/0200439) in view of Van Horne (US Patent 5987430) in view of what was well-known in the networking art.

Moskowitz disclosed (re. Claim 1) a plurality of terminals, each terminal located in a –predetermined location, each terminal arranged to generate communications having a location identifier unique to the terminal; (Moskowitz-Paragraph 12,' *a generator to generate a packet watermark associated with the stream of data*' , Paragraph 28,' *associated packet watermark[s] by determinations of any or combinations there of the following: Ethernet IDs, port IDs, URLs, DNS addresses, IP addresses*')

Moskowitz disclosed (re. Claim 1) an internet connection system arranged to receive the communications from the terminals and to selectively connect the terminals to the internet, arranged to record a communication band usage for each of the terminals (Moskowitz-Paragraph 15,' *establishing an account whereby a customer is credited with a predetermined amount of bandwidth usage*') indicating a quantity of communications through the system having the unique location identifier of the terminal, and arranged to generate a communication fee data unique to each terminal, (Moskowitz-Paragraph 15,' *debit may be in an amount of bandwidth usage which corresponds to an agreed upon transactional charge*').

Moskowitz did not explicitly disclose (re. Claim 1) wherein the communication fee data based on a ratio of the recorded communication band usage for the terminal to a total of the recorded communication band usage of all of the plurality of terminals.

Moskowitz disclosed a convenience premium for greater bandwidth allocation (Moskowitz-Paragraph 78, *'higher demands for bandwidth'*) and also a need to prevent bandwidth hoarding (Moskowitz-Paragraph 86, *'Some mechanism must be in place to prevent attacks on the system, by a party, who, in effect, tries to corner the market in bandwidth'*). At the same time Moskowitz disclosed (Moskowitz-Paragraph 86) that *the accounting of the bandwidth used should not exceed the value of bandwidth provided.*

The Examiner notes that at the time of the invention it was well-known in the art that the bandwidth usage is often a component in the price charged to the customer by the operator/service provider. Given this knowledge, it would have been obvious to a person of ordinary skill in the networking art to calculate said convenience premium disclosed by Moskowitz, wherein the communication premium is based on a ratio of the recorded communication band usage for the terminal to a total of the recorded communication band usage of all of the plurality of terminals.

Furthermore, while Moskowitz did not disclose (re. Claim 1) a location for each terminal, it would have been obvious to a person of ordinary skill in the networking art that the *'Ethernet IDs, port IDs, URLs, DNS addresses, IP addresses'* representing the

data stream source are associated with a physical location of the terminal in the configuration database of a network management system.

While Moskowitz substantially disclosed the claimed invention, Moskowitz did not disclose (re. Claim 1) where said system is implemented using a gateway providing access to the internet.

Moskowitz did not disclose (re. Claim 1) wherein at least one terminal provided in each of a plurality of predetermined locations is connected to internet via a gateway commonly used by at least two locations and an access line.

Van Horne disclosed (re. Claim 1) wherein at least one terminal provided in each of a plurality of predetermined locations is connected to internet via a gateway commonly used by at least two locations and an access line. (Van Horne- Column 7 Lines 10-20, 'the server 110 acts as an interface between the client system 10 and the electronic communications network 310')

Moskowitz and Van Horne are analogous art because they present concepts and practices regarding calculating billing charges for connectivity to the Internet. At the time of the invention it would have been obvious to a person of ordinary skill in the networking art to combine Van Horne into Moskowitz. The motivation for said combination would have been to provide a less complicated system for access and billing. (Van Horne-Column 3 Lines 60-65)

Moskowitz-Van Horne disclosed (re. Claim 9) an internet system, wherein: at least one wireless terminal and a wireless LAN base station wireless LAN (Van Horne- Column 7 Lines 66-68,' *access port 160 is equipped with a wireless transmitter and the server 110 (more specifically interface 150) is equipped with a wireless receiver*') connected to the wireless terminal are provided in each of a plurality of predetermined locations; at least one wireless terminal wireless LAN connected to the wireless LAN base station belonging to the afore-said one location is provided in a different location adjacent to the afore-said location; the wireless terminal is connected to internet via the gateway (Van Horne- Column 7 Lines 10-20,' *the server 110 acts as in interface between the client system 10 and the electronic communications network 310*') connected to the wireless LAN base station and an access line connected to the gateway; and locations, in which terminals in communication are provided, is discriminated, (Moskowitz-Paragraph 12,' *a generator to generate a packet watermark associated with the stream of data*' , Paragraph 28,' *associated packet watermark[s] by determinations of any or combinations there of the following: Ethernet IDs, port IDs, URLs, DNS addresses, IP addresses*') the used communication band is recorded for each location, (Moskowitz-Paragraph 15,' *establishing an account whereby a customer is credited with a predetermined amount of bandwidth usage*') and a communication fee is computed based on the used communication band recorded for each location. (Moskowitz-Paragraph 15,' *debit may be in an amount of bandwidth usage which corresponds to an agreed upon transactional charge*')

Claims 10 is rejected on the same basis as Claim 9.

Furthermore, the Examiner notes that (re. Claim 10) the methods to *selectively connectively connect the wireless terminals to the internet through the gateway and through the wireless LAN base station of the plurality of wireless LAN base station having the highest measured communication speed* were well-known in the networking art. (See Voit, US Patent 6157636, Column 24 Lines 30-50, '*optimal routing and gateway selection*'))

Moskowitz-Van Horne disclosed (re. Claim 12) an internet connection system, wherein: at least one wireless terminal and a wireless LAN base station wireless LAN connected to the wireless terminal (Van Horne-Column 7 Lines 66-68, '*access port 160 is equipped with a wireless transmitter and the server 110 (more specifically interface 150) is equipped with a wireless receiver*') are provided in each of a plurality of predetermined locations; each wireless terminal is also wireless LAN connected to the wireless LAN base station in a location other than the own location; the wireless LAN base stations belonging to the plurality of locations are respectively connected to gateways gateway (Van Horne- Column 7 Lines 10-20, '*the server 110 acts as in interface between the client system 10 and the electronic communications network 310*') and connected to internet via an access line connected to the gateway;

Moskowitz-Van Horne disclosed (re. Claim 13) an internet connection system, wherein: at least one wireless terminal and a wireless LAN base station wireless LAN connected to the wireless terminal (Van Horne-Column 7 Lines 66-68,' *access port 160 is equipped with a wireless transmitter and the server 110 (more specifically interface 150) is equipped with a wireless receiver*') are provided in each of a plurality of predetermined locations; each wireless terminal is also wireless LAN connected to the wireless LAN base station in a location other than the own location; the wireless LAN base stations belonging to the plurality of locations are respectively connected to gateways gateway (Van Horne- Column 7 Lines 10-20,' *the server 110 acts as in interface between the client system 10 and the electronic communications network 310*') and connected to internet via an access line connected to the gateway;

Moskowitz-Van Horne disclosed (re. Claim 14) wherein the maximum communication speed is preset for each location, (Moskowitz-Paragraph 15,' *establishing an account whereby a customer is credited with a predetermined amount of bandwidth usage*', Paragraph 50,'*bandwidth affects speed*') .

While Moskowitz substantially disclosed the claimed invention (re. Claim 14) Moskowitz did not disclose wherein the communication operation is set to a waiting state when the communication band sum in the location, in which the terminal is

provided, exceeds the maximum communication speed and is resumed when the communication band becomes lower than the maximum communication speed.

The Examiner notes that Claim 14 is describing an operating condition that is very common to bottleneck conditions arising from the shortage of available bandwidth. At the time of the invention it would have been well-known in the networking art that whenever the total bandwidth allocation is consumed, the communication operation is set to a wait state until additional bandwidth becomes available.

Moskowitz-Van Horne disclosed (re. Claim 15) *wherein a user in one location is re-assigned a quantity of the communication bands assigned to another location, (Moskowitz-Paragraph 89, 'any' user could buy bandwidth rights at times of low demand, and hope to sell them at a profit in times of higher demand)* and the user in the aforesaid location pays the use fee to the user in the different location. (Moskowitz-Paragraph 102, Paragraph 104)

While Moskowitz substantially disclosed the claimed invention Moskowitz did not disclose (re. Claim 17) wherein the locations are rooms.

Moskowitz-Van Horne disclosed (re. Claim 17) wherein the locations are rooms. (Van Horne-Column 8 Lines 15-20)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7, 11, 16 rejected under 35 U.S.C. 103(a) as being unpatentable over Moskowitz (US Publication 2003/0200439) in view of Van Horne (US Patent 5987430) in view of Short (US Publication 20060239254 Applicant) in view of what was well-known in the networking art.

Moskowitz-Van Horne disclosed (re. Claim 7) an internet connection system comprising a plurality of gateways.

Regarding the plurality of gateways, the Examiner notes that mere duplication of parts has no patentable significance unless a new and unexpected result is produced.

While Moskowitz-Van Horne substantially disclosed the invention, Moskowitz-Van Horne did not disclose (re. Claim 7) a charging server.

Short disclosed (re. Claim 7) a charging server with multiple gateway devices for implementing internet access. (Short-Figure 1, 'AAA Server', Paragraph 18)

Moskowitz, Van Horne and Short are analogous art because they present concepts and practices regarding calculating billing charges for connectivity to the Internet. At the time of the invention it would have been obvious to a person of ordinary skill in the networking art to combine Short into Moskowitz-Van Horne. The motivation for said combination would have been so that each packet can be filtered through the selective AAA process, so that a user can be identified and authorized access. (Short-Paragraph 7)

Moskowitz-Van Horne-Short disclosed (re. Claim 7) a charging server (Short-Figure 1, 'AAA Server', Paragraph 18) arranged to receive the communications from the terminals and to selectively connect the terminals to the internet, arranged to record a communication band usage for each of the terminals (Moskowitz-Paragraph 15,' *establishing an account whereby a customer is credited with a predetermined amount of bandwidth usage*') indicating a quantity of communications through the system having the unique location identifier of the terminal, and arranged to generate a communication fee data unique to each terminal, (Moskowitz-Paragraph 15,' *debit may be in an amount of bandwidth usage which corresponds to an agreed upon transactional charge*').

The Examiner notes that the methods for identifying devices and allowing access according to MAC addresses were well-known in the networking art.

Moskowitz-Van Horne-Short disclosed (re. Claim 11) an internet connection system, wherein: at least one wireless terminal and a wireless LAN base station wireless LAN connected to the wireless terminal (Van Horne-Column 7 Lines 66-68,' *access port 160 is equipped with a wireless transmitter and the server 110 (more specifically interface 150) is equipped with a wireless receiver*') are provided in each of a plurality of predetermined locations; each wireless terminal is also wireless LAN connected to the wireless LAN base station in a location other than the own location; the wireless LAN base stations belonging to the plurality of locations are connected to a common gateway (Van Horne- Column 7 Lines 10-20,' *the server 110 acts as in interface between the client system 10 and the electronic communications network 310*')

Moskowitz-Van Horne-Short disclosed (re. Claim 11) a charging server (Short-Figure 1, 'AAA Server', Paragraph 18) arranged to receive the communications from the terminals and to selectively connect the terminals to the internet, arranged to record a communication band usage for each of the terminals (Moskowitz-Paragraph 15,' *establishing an account whereby a customer is credited with a predetermined amount of bandwidth usage*') indicating a quantity of communications through the system having the unique location identifier of the terminal, and arranged to generate a communication fee data unique to each terminal, (Moskowitz-Paragraph 15,' *debit may be in an amount of bandwidth usage which corresponds to an agreed upon transactional charge*').

Moskowitz-Van Horne-Short disclosed (re. Claim 16) wherein each of the terminals are arranged to include a MAC address and to generate communication reflecting the MAC address, and wherein the gateway includes a register to store authorized MAC addresses for each of the predetermined locations, and wherein the, gateways is arranged to enable communications between each of the terminals and the internet based on the MAC address of the communication terminal. (Short- Paragraph 63)

(10) Response to Argument

The Applicant presents the following argument(s) [*in italics*]:

... Moskowitz does not disclose subject matter within the plain, broadest reasonable meaning of a gateway arranged to record Internet bandwidth usage by a terminal... Valuing and trading rights to future bandwidth usage is not within the plain meaning, i.e., the broadest reasonable meaning of anything, much less a gateway, arranged to record internet bandwidth usage by a user or by a terminal.

The Examiner respectfully disagrees with the Applicant.

Moskowitz disclosed using bandwidth as currency between many users/market participants (Moskowitz-Paragraph 91-92) wherein each party is given an account for owning/using/trading bandwidth rights (Moskowitz-Paragraph 94) and furthermore provided a facility for settling bandwidth transactions. Moskowitz Paragraph 95 disclosed that all the data being handled for exchange function and fulfillment can be measured in terms of bandwidth, the present invention serves as a basis for increasing the likelihood of enabling bandwidth to act as currency for information data, as well as optimizing the economic use of telecommunications networks. With these elements, a trading market system can be implemented.

The Examiner notes where bandwidth is used as currency then there is intrinsic cost being assigned to the bandwidth. Furthermore purchased bandwidth is equivalent to bandwidth usage because the purchased bandwidth is taken off the market and is thus unavailable to other users.

Moskowitz Paragraph 106 disclosed a sample embodiment wherein the user/PDA may also place a cost structure on where the device is used in relation to its registration location and may charge for the amount of data which is uploaded, downloaded or exchanged. This may be measured in bandwidth terms (such as a charge per some amount of bytes or bits).

Moskowitz Paragraph 108 disclosed that the point of this embodiment is to emphasize the treatment of bandwidth as a commodity which may be valued in a transaction.

The Examiner notes that where Moskowitz is concerned with maintaining individual accounts and clearinghouse function for settling accounts then Moskowitz disclosed *recording internet bandwidth usage by a user or by a terminal*.

However Moskowitz did not disclose a gateway for *recording internet bandwidth usage by a user or by a terminal*.

Van Horne disclosed a server acting as a gateway (Column 7 Lines 10-25) for monitoring access ports, maintaining client usage databases and billing the clients. (Van Horne-Column 15 Lines 30-45)

Thus the combination of Moskowitz-Van Horne disclosed *a gateway, arranged to record internet bandwidth usage by a user or by a terminal*.

Furthermore while Moskowitz did not explicitly disclose (re. Claim 1) wherein the communication fee data is based on a ratio of the recorded communication band usage for the terminal to a total of the recorded communication band usage of all of the plurality of terminals, Moskowitz disclosed a convenience premium for greater bandwidth allocation (Moskowitz-Paragraph 78, '*higher demands for bandwidth*') and also a need to prevent bandwidth hoarding (Moskowitz-Paragraph 86, '*Some mechanism must be in place to prevent attacks on the system, by a party, who, in effect, tries to corner the market in bandwidth*'). At the same time Moskowitz disclosed (Moskowitz-Paragraph 86) that *the accounting of the bandwidth used should not exceed the value of bandwidth provided*.

Moskowitz disclosed that the convenience premium is a function of supply and demand. (Moskowitz-Px 79)

The Examiner notes that at the time of the invention it was well-known in the art that the bandwidth usage is often a component in the price charged to the customer by the operator/service provider. Given this knowledge, it would have been obvious to a person of ordinary skill in the networking art to calculate said convenience premium disclosed by Moskowitz, wherein the communication premium is based on a ratio of the recorded communication band usage for the terminal to a total of the recorded communication band usage of all of the plurality of terminals. It would have been obvious to a person of ordinary skill in the networking art that the higher the ratio compared to the existing supply (total band usage) then greater convenience is provided to the requesting customer.

The Applicant presents the following argument(s) *[in italics]*:

...The Examiner's statement regarding Moskowitz "generating a communication fee unique to each terminal", however, is not supported by Moskowitz's disclosure.

The Examiner respectfully disagrees with the Applicant.

As presented above Moskowitz disclosed maintaining an account for each party involved in the purchase/use of bandwidth. Moskowitz Paragraph 106 disclosed a sample embodiment wherein the user/ PDA may also place a cost structure on where the device is used in relation to its registration location and may charge for the amount of data which is uploaded, downloaded or exchanged. This may be measured in bandwidth terms (such as a charge per some amount of bytes or bits).

Furthermore the Examiner notes that the gateway by Van Horne is able to bill each client according to operation-based billing techniques (Van Horne-Column 11 Lines 5-10) by monitoring each access port (Van Horne-Column 17 Lines 5-15) and client usage rates (Van Horne-Column 18 Lines 10-15). The Examiner notes that at the time of the invention it was well-known in the art that the bandwidth usage is often a component in the price charged to the customer by the operator/service provider as part of operation-based billing techniques.

The Applicant presents the following argument(s) *[in italics]*:

Appellant submits that the collected teachings Moskowitz and Van Horne fail to support any rationale for combining and modifying their respective disclosures to meet claim 1 that is listed under the MPEP § 2141 guidelines for combining and modifying art under KSR Int'l Co. v. Teleflex Inc., 127 S.Ct. 1727, 1740 (2007).

The Examiner respectfully disagrees with the Applicant.

Moskowitz and Van Horne are analogous art because they present concepts and practices regarding calculating billing charges for connectivity to the Internet on an individual client basis wherein said charges are based on bandwidth usage. At the time of the invention it would have been obvious to a person of ordinary skill in the networking art to combine Van Horne into Moskowitz. The motivation for said combination would have been to provide a less complicated system for access and billing. (Van Horne-Column 3 Lines 60-65)

The Supreme Court in *KSR International Co. v. Teleflex Inc.*, identified a number of rationales to support a conclusion of obviousness which are consistent with the proper "functional approach" to the determination of obviousness as laid down in *Graham*. An exemplary rationale that may support a conclusion of obviousness is that of 'applying a known technique to a known device (method, or product) ready for improvement to yield predictable results.'

The Examiner notes that where Moskowitz disclosed a known technique for an accounting/ settlement facility for bandwidth transactions it would have been obvious for Moskowitz to implement said accounting/settlement facility on the known device (gateway/server) of Van Horne, said combination yielding predictable results.

The Applicant presents the following argument(s) *[in italics]*:

...regardless of Van Horne having a teaching of wireless terminals and base stations, the collective disclosures of Moskowitz and Van Horne have no teaching or other disclosure of, and suggestion toward, the claim 9 arrangement of the gateway to generate a fee unique for each of plurality of terminals, based on any ratio of any terminars or any user's recorded bandwidth usage with respect to the total recorded bandwidth usage of a plurality of terminals, or users.

The Examiner respectfully disagrees with the Applicant.

Furthermore while Moskowitz did not explicitly disclose (re. Claims 1,9) wherein the communication fee data is based on a ratio of the recorded communication band usage for the terminal to a total of the recorded communication band usage of all of the plurality of terminals, Moskowitz disclosed a convenience premium for greater bandwidth allocation (Moskowitz-Paragraph 78, '*higher demands for bandwidth*') and also a need to prevent bandwidth hoarding (Moskowitz-Paragraph 86, '*Some mechanism must be in place to prevent attacks on the system, by a party, who, in effect, tries to corner the market in bandwidth*'). At the same time Moskowitz disclosed (Moskowitz-Paragraph 86) that *the accounting of the bandwidth used should not exceed the value of bandwidth provided.*

Moskowitz disclosed that the convenience premium is a function of supply and demand. (Moskowitz-Px 79)

The Examiner notes that at the time of the invention it was well-known in the art that the bandwidth usage is often a component in the price charged to the customer by the operator/service provider. Given this knowledge, it would have been obvious to a person of ordinary skill in the networking art to calculate said convenience premium disclosed by Moskowitz, wherein the communication premium is based on a ratio of the recorded communication band usage for the terminal to a total of the recorded communication band usage of all of the plurality of terminals. It would have been obvious to a person of ordinary skill in the networking art that the higher the ratio compared to the existing supply (total band usage) then greater convenience is provided to the requesting customer.

The Applicant presents the following argument(s) [*in italics*]:

... none of Short, Moskowitz, and/or Van Horne teaches, discloses or suggests anything of, or toward generating the communication fee for each authorized (based on MAC or any equivalent identifier) terminal based on a ratio of its stored communication usage to the total communication usage of all authorized terminals.

The Examiner respectfully disagrees with the Applicant.

The Examiner notes that the methods for identifying devices and allowing access according to MAC addresses were well-known in the networking art.

It would have been obvious for Van Horne to monitor each client usage according to network card MAC address (Van Horne-Column 16 Lines 60-65) and for the billing techniques of Moskowitz and Short to *generate the communication fee for each authorized (based on MAC or any equivalent identifier).*

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/G. B./

Examiner, Art Unit 2144

/John Follansbee/

Supervisory Patent Examiner, Art Unit 2151

Conferees:

Art Unit: 2151

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